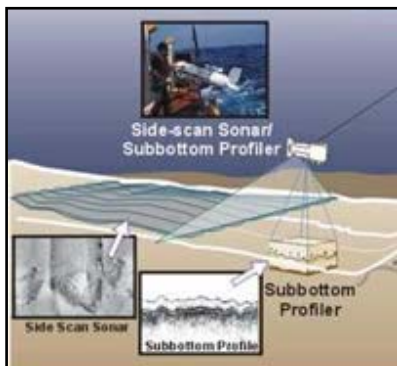
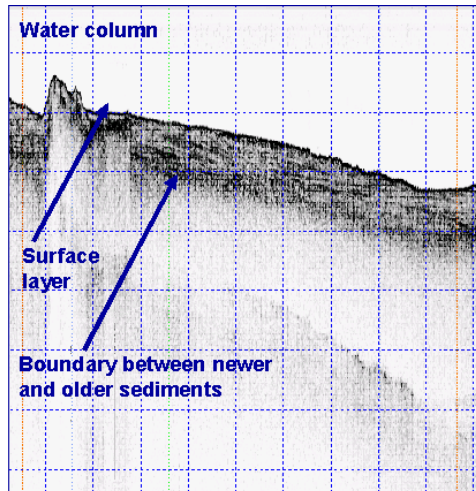
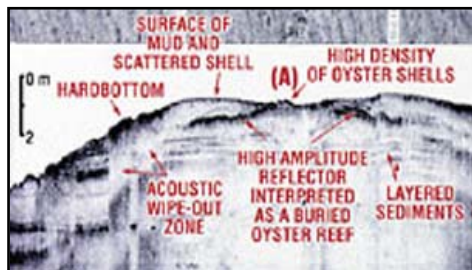

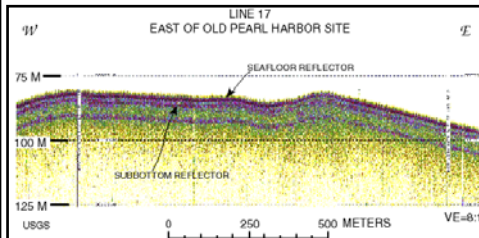




Summary View of Sub-bottom Survey Technique



Application	Data Coverage	Resolution			Key Points
		Vertical	Horizontal	Image	
Sub-bottom imagery	Imagery Data	10's cm	N/A	cm-m	<ul style="list-style-type: none">• Stratigraphy image or point data• Detection of subsurface sediment horizons• Trade-offs between resolution and penetration depth• Common Frequency Ranges: 400 Hz to 20 kHz (for higher resolution systems)• Susceptible to surficial gas interference + H29• Moderate complexity and cost for acquisition and processing
Data Collection ¹				Raw Data ²	Processed Data ³
					
<p>Diagram of a combined sub-bottom profiling system and side-scan sonar.</p>				<p>Sub-bottom profile from the Hudson River, New York.</p>	<p>Example of sub-bottom profiling record used for mapping oyster habitat.</p>
					
<p>Deployment of sub-bottom profiling system.</p>					<p>This high resolution 3.5 kHz sub-bottom profile shows the seafloor between the northern parts of two dredged material deposits off Honolulu, Hawaii.</p>

N/A = Not applicable

¹Data collection images from Science Applications International Corporation and U.S. Geological Survey. ²Raw data image from New York State Department of Environmental Conservation.

³Processed data images from NOAA Research and U.S. Geological Survey.